

# PREFACE

The present issue is the 11 th volume of the Josai Mathematical Monographs (JMM). JMM is founded by the Graduate School of Science of Josai University (GSSJU), and appears yearly. JMM aims at formal as well as informal information on developments in mathematical research by the faculty of mathematics in GSSJU and others.

This issue consists of thirteen refereed academic papers addressing topics on applied functional analysis, in particular, harmonic analysis, statistics, fixed point theory, measure theory, differential equation, function algebra, discrete mathematics, operator theory and so on. Every representative author gave a talk related to their paper at JMM Workshop on Applied Functional Analysis which was held at the Sakado Campus of Josai University (JU) on November 25 in 2017. The editors sincerely thank the authors for submitting excellent papers and giving interesting talks at the workshop and hope that this issue will provide the reader with a good view of the present status of functional analysis and its applications.

The publication of this issue and the workshop were supported by funding from the Special Grant of JU. We would like to express our gratitude to the support.

The editors wish that the publication of the Josai Mathematical Monographs will be more fruitful in the future. The papers in some previous volumes of JMM are available at the website of Mizuta memorial library: [http://libir.josai.ac.jp/il/meta\\_pub/G0000284repository](http://libir.josai.ac.jp/il/meta_pub/G0000284repository).

March 2018

Kenjiro Yanagi (Editor in Chief)